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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/806,827	03/23/2004	Yoji Nagase	1324.70101	4226
<div>7590 07/08/2009</div> <div>Patrick G. Burns, Esq. GREER, BURNS & CRAIN, LTD. Suite 2500 300 South Wacker Dr. Chicago, IL 60606</div>				
EXAMINER				
CHOW, YUK				
ART UNIT		PAPER NUMBER		
2629				
MAIL DATE		DELIVERY MODE		
07/08/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/806,827

Applicant(s)

NAGASE, YOJI

Examiner

YUK CHOW

Art Unit

2629

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02/09/2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-10 is/are allowed.
- 6) ☒ Claim(s) 1-4, and 11-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/CDC)
- Paper No(s)/Mail Date _____

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 3 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoon (US 6,005,542).

As to **claim 3**, Yoon discloses a method of driving an active matrix type liquid crystal display panel, comprising the step of:

performing a pre-scanning and a main scanning to each horizontal line (see Fig. 8 and 10);

wherein a value of an on-voltage of a gate signal in the pre-scanning is different from a value of an on-voltage of the gate signal in the main scanning (see Fig. 8 and 10, on-voltage in first pulse is different from the following one).

As to **claim 11**, Yoon discloses a method of driving an active matrix type liquid crystal display panel, comprising the step of:

performing a pre-scanning and a main scanning to each horizontal line;

wherein a value of a gate-off voltage between the pre-scanning period and the main scanning period is set to be higher than a value of the gate-off voltage after the main scanning period (see Fig. 8 and 10, gate-off voltage, $V_{\text{gate}} + \Delta V_{\text{gl}}$ is set to be higher than gate-off voltage V_{gate} after the main scanning period (a)).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 2, 4 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Matsubara et al.(US 6,549,187).

As to **claim 1**, Matsubara discloses a method of driving an active matrix type liquid crystal display panel during horizontal scanning periods, using a data signal whose polarity is inverted at the beginning and end of each horizontal scanning period, the driving method also using a gate signal which is raised and broken down at spaced intervals, a selected horizontal scanning period occurring at least in part while the gate signal is raised, comprising the step of:

performing a pre-scanning and a main scanning to each horizontal line using the gate signal (see Fig. 11a);

wherein the gate signal is raised in the main scanning at a timing on or after a first inversion of the data signal (see Fig. 11a, gate signal (101) is raised at a timing on a first inversion) occurring during the selected horizontal scanning period, and the gate signal is broken down in the main scanning at a timing prior to the next following

inversion of the data signal occurring during the selected horizontal scanning period (See Fig. 11a, 101 is broken down before the next inversion occurs).

As to **claim 2**, Matsubara discloses a method of driving a liquid crystal display panel according to claim 1,

wherein the timing for raising the gate signal relative to inverting the polarity of the data signal in the pre-scanning is the same as the timing for raising the gate signal relative to inverting the polarity of the data signal in the main scanning (See Fig. 8a, timing for 83 is the same as in 81.).

As to **claim 4**, Matsubara discloses a method of driving an active matrix type liquid crystal display panel, comprising the step of:

performing a pre-scanning and a main scanning to each horizontal line (Fig. 3(1H));

wherein a length between timing of raising of a gate signal and timing of next following breaking down of the gate signal in the pre-scanning period is different from that in the main scanning period (See Fig. 3, gate signal 31 and gate signal 32 are not the same.).

As to **claim 12**, Matsubara discloses an active matrix type liquid crystal display panel comprising a drive circuit driven by a method of driving a liquid crystal display panel according to claim 1 (see Abstract).

Allowable Subject Matter

5. Claims 5-10 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: As to independent claim 5, cited reference does not teach or suggest claimed subject matter: ***a value of a predetermined pre-writing data voltage that is a data voltage in the pre-writing data voltage period is different from a value of a display data voltage that is a data voltage in said another period.***

Dependent claims 6-10 are also allowed.

Response to Arguments

6. Applicant's arguments filed 02/09/2009 have been fully considered but they are not persuasive.
7. Regarding claims 1 and 4, in response to applicant's arguments, the recitation "using a data signal whose polarity is inverted at the beginning and the end of the each horizontal scanning period" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).
8. Regarding claims 3 and 11, applicant argues that Yoon does not disclose performing both pre-scanning and a main scanning for each horizontal line. However examiner respectfully disagrees, interpretation of per-scanning period is based on the definition in the specification: "a pre-scanning period B is set five scanning periods to

four scanning period before main scanning period A" see Abstract. In other words, pre-scanning period is nothing but pre-defined arbitrary number of scanning period for each horizontal line, which Yoon describes in Fig. 8, Fig. 10 and Col. 8 line 66-Col. 9 line 22.

Conclusion

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to YUK CHOW whose telephone number is (571)270-1544. The examiner can normally be reached on 8-6 M-TH E.T..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amare Mengistu can be reached on 571 272-7674. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Y. C./
Examiner, Art Unit 2629

/Amare Mengistu/
Supervisory Patent Examiner, Art Unit 2629